

WHAT IS CLAIMED IS:

1. In a computing environment, a method comprising:
receiving a request for taxonomy-related information, the
request including identification data and relationship data;
5 extracting data from the request; and
querying a database based on the data extracted from the
request to obtain taxonomy-related information about at least
one node having a relationship that corresponds to the
relationship data.

10 2. The method of claim 1 further comprising, returning
the taxonomy-related information in response to the request.

15 3. The method of claim 1 wherein the identification
data comprises an identifier of a taxonomy and the
relationship data indicates a root node relationship, and
wherein returning the taxonomy-related information in response
to the request comprises returning an identifier of at least
one root node within the taxonomy.

20 4. The method of claim 3 wherein returning the
taxonomy-related information in response to the request
comprises identifying the relationship along with each other
node identifier that corresponds to the relationship data.

5. The method of claim 1 wherein the identification data comprises an identifier of a taxonomy and a node identifier of a node within the taxonomy, and wherein
5 returning the taxonomy-related information in response to the request comprises returning at least one other node identifier that corresponds to the relationship data.

6. The method of claim 5 wherein the relationship data
10 indicates a parent relationship.

7. The method of claim 5 wherein the relationship data indicates a child relationship.

15 8. The method of claim 5 wherein returning the taxonomy-related information in response to the request comprises returning an identifier of another taxonomy.

9. The method of claim 8 wherein returning the
20 taxonomy-related information in response to the request further comprises returning at least one node identifier corresponding to at least one node in the other taxonomy.

10. The method of claim 8 wherein the relationship data indicates an equivalence relationship.

11. The method of claim 1 wherein returning the
5 taxonomy-related information in response to the request further comprises returning at least one attribute value that indicates whether a node corresponding to that attribute value comprises a classification node.

10 12. The method of claim 1 wherein returning the taxonomy-related information in response to the request further comprises returning at least one text string.

13. The method of claim 1 wherein the request includes
15 at least one other set of identification data and relationship data, and wherein the response returns data corresponding to the request in the order in which the identification data and relationship data was received.

20 14. The method of claim 1 wherein the request comprises an XML message, and wherein returning the taxonomy-related information in response to the request further comprises formatting the response as an XML message.

15. The method of claim 1 wherein the taxonomy-related information corresponds to a taxonomy maintained at a UDDI server.

5 16. A computer-readable medium having computer-executable instructions for performing the method of claim 1.

17. In a computing environment, a method comprising:
constructing a request for taxonomy data, the request
10 including identification data from which a taxonomy may be identified and at least one relationship qualifier;
communicating the request to a server;
receiving a response from the server including
relationship information corresponding to the relationship
15 qualifier; and
presenting information about the taxonomy based on the relationship information in the response.

18. The method of claim 17 wherein the identification
20 data comprises a unique identifier and the relationship qualifier indicates a root node relationship with the taxonomy, and wherein the response includes information about at least one root node in the taxonomy.

19. The method of claim 17 wherein the identification data further includes node identification data from which a node within the taxonomy may be identified.

5 20. The method of claim 19 wherein the relationship qualifier indicates a parent node of a node identified by the node identification data, and wherein the response includes information about the parent node.

10 21. The method of claim 19 wherein the relationship qualifier indicates a child node of a node identified by the node identification data, and wherein the response includes information about at least one child node, if any exist.

15 22. The method of claim 19 wherein the relationship qualifier indicates an equivalent node of a node identified by the node identification data.

20 23. The method of claim 17 wherein receiving the response from the server further includes receiving an attribute value that indicates whether a node in the taxonomy is intended as a classification node.

24. The method of claim 17 wherein receiving the response from the server further includes receiving at least one text string that corresponds to a node in the taxonomy.

5 25. The method of claim 17 wherein constructing a request for taxonomy data comprises constructing an XML message.

10 26. The method of claim 25 wherein communicating the request to a server comprises sending the XML message to a UDDI server.

15 27. A computer-readable medium having computer-executable instructions for performing the method of claim 17.

28. In a computing environment, a system comprising:
a client, the client including an application program that presents taxonomy-related data; and

a server that maintains taxonomy data, the server coupled
20 to receive taxonomy-related requests from the client seeking relationship information about nodes in a taxonomy, and in response to each request, to locate relationship information corresponding to a node in a specified taxonomy and to return

a response to the client from which the client may present the taxonomy-related data.

29. The system of claim 28 wherein the relationship
5 information corresponding to the node in the specified
taxonomy comprises a root qualifier.

30. The system of claim 28 wherein the relationship
information corresponding to the node in the specified
10 taxonomy comprises a parent qualifier.

31. The system of claim 28 wherein the relationship
information corresponding to the node in the specified
taxonomy comprises a child qualifier.

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32. The system of claim 28 further comprising a database
in which the server maintains the taxonomy data.

33. The system of claim 28 wherein the taxonomy-related
20 requests from the client comprise XML messages.

34. The system of claim 28 wherein the response to the
client comprises an XML message.

35. The system of claim 28 wherein the server comprises a UDDI server.

36. The system of claim 28 wherein the client provides
5 the request to the server by calling an application programming interface, the application programming interface formatting the request as a message for communicating with the server and returning the response to the client in response to the application programming interface call.

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37. A computer-readable medium having stored thereon a data structure comprising a plurality of records, each record comprising:

a first field corresponding to a unique identifier of a
15 taxonomy;

a second field corresponding to a value of a node in the taxonomy identified in the first field;

a third field corresponding to a parent node related to the node in the first field; and

20 wherein the data structure is queried with a key set comprising at least one key so as to determine a relationship within a taxonomy.

38. The data structure of claim 37 wherein the key set comprises a unique identifier of a taxonomy, the key set used to query for a match in the first field to determine at least one root node of the taxonomy as maintained in the second
5 field of at least one record having a NULL value in the third field.

39. The data structure of claim 37 wherein the key set comprises a unique identifier of a taxonomy as one key and a
10 node identifier of a node within that taxonomy as another key, the key set used to query for a match in the first and second fields to determine a parent value in the third field.

40. The data structure of claim 37 wherein the key set
15 comprises a unique identifier of a taxonomy as one key and a node identifier of a node within that taxonomy as another key, the key set used to query for a match in the first and third fields to locate at least one record having that parent value in the third field.

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41. In a computing environment, a system comprising:
means for receiving a request that indicates
identification data and relationship data corresponding to a
taxonomy; and

means for querying a database based on the identification data and relationship data to obtain taxonomy-related information about at least one node in the taxonomy.

5 42. The system of claim 41 further comprising means for returning the taxonomy-related information in response to the request.

10 43. The system of claim 41 wherein the means for querying the database comprises request handling means in a UDDI-server environment.